

Non-CO₂ Greenhouse Gases: Nitrous Oxide

Source/Sectors: Energy/Municipal Solid Waste Combustion

Technology: Options for emission reduction related to MSW combustion (B.2.3)

Description of the Technology:

About 7 to 17% of the municipal solid wastes (MSW) in the United States are managed by combustion. Almost all combustion of MSW occurs at waste-to-energy facilities where energy is recovered, while N₂O is a by-product of the combustion process (USEPA, 2006a). Nitrous oxide emissions from this sector depend on a variety of factors, including types of waste as well as combustion temperature. Overall, waste incineration is a relatively minor source of N₂O emission. The emission from this sector can be effectively reduced from source reduction, reuse, and recycling of municipal solid waste (IEA, 2000).

Effectiveness: Low

Implementability: Low

Reliability: Low

Maturity: Low

Environmental Benefits: It reduces nitrous oxide emission.

Cost Effectiveness: Low

Industry Acceptance Level: Low

Limitations: Most of these technological options are still in the development stage.

Sources of Information:

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